California Department of Health and Human Services

RUBELLA Case and Outbreak 'Quicksheet'

To be used as a checklist for determining potential cases and assisting in the completion of the Rubella Case Report (PM 358) or the Congenital Rubella Syndrome Case Report (CDC 4.271).

Infectious agent: The rubella virus is a togavirus, genus *Rubivirus*.

Mode of transmission: a) Person to person via large respiratory droplets or b) Airborne transmission or through direct contact with infected droplets or saliva.

Incubation period: Generally 16-18 days post exposure. The maximum period is from 12-23 days post exposure.

Period of Communicability: The infectious period is considered to be from 7 days before onset of rash to 7 days after onset of rash.

CDC CASE DEFINITION and CLASSIFICATION

Clinical Case Definition: An illness with all of the following characteristics:

☐Acute onset of generalized maculopapular rash

☐Temperature greater than 37.2 C (99 F), if measured

☐Arthralgia/arthritis, or lymphadenopathy, or conjunctivitis

Case Classification:

Confirmed- a case that is ☐ laboratory confirmed or that meets the clinical case definition and is ☐ epidemiologically linked to a confirmed case.

Probable- meets the ☐ clinical case definition, has no or noncontributory serologic or virologic testing, and is not epidemiologically linked to a confirmed case.

Suspected- any generalized rash illness of acute onset

CLINICAL FEATURES

Thirty to 50 percent of rubella cases are subclinical or inapparent because symptoms of the disease can be mild.

Incubation

The incubation period varies from 12-23 days, but usually 16-18 days

Prodrome

In older children and adults, occurs 1-5 days before onset of rash

Symptoms are often mild, including low grade fever, malaise, swollen glands and upper respiratory infection symptoms.

Rash

Initially occurs on the face and progresses from head to feet, being less evident on extremities than on face and trunk.

Fainter than measles rash, usually does not coalesce and is occasionally itchy

Lasts about 3 days

Arthralgia (achy joints)

Occurs at the same time or shortly after rash

Occurs in 70% of adult women but rarely in adult males or children

LABORATORY TESTING AND CONFIRMATION

☐ A laboratory confirmed case does not need to meet the clinical case definition.

☐ Laboratory confirmation is obtained from a ☐ single serum specimen drawn 2-28 days after rash onset which contains rubella IgM antibody OR,

☐ A significant rise in rubella IgG antibody in paired acute and convalescent sera drawn 14 days apart (3 weeks apart for an exposed person who does not develop a rash illness).

☐ The isolation of rubella virus from urine for strain analysis can be used as an important epidemiologic tool.

RECOMMENDED TREATMENT AND CHEMOPROPHYLAXIS

Treatment of rubella is supportive. Neither rubella vaccine nor IG is effective for postexposure prophylaxis.

RUBELLA IMMUNITY

Proof of rubella immunity is determined by meeting one of the following criteria:

☐ 1. Documentation of having received one dose of live virus rubella vaccine on or after 12 months of age

☐ 2. Serological evidence of rubella antibody.

(OVER)

RUBELLA INVESTIGATION

Rubella is a reportable disease, and County or Local Health Departments must be notified within 24 hours when a case of rubella is suspected. A California Rubella Case Report Form (PM 358) must be submitted for each confirmed rubella case.
Reporting of communicable disease is **mandated** under the California Code of Regulations (Title17,CCR 2500)

Investigation process:
1. Upon notification of a suspected rubella case, complete a ☐ Rubella Case Report Form by conducting an interview with the rubella case to:
☐ confirm patient information (**at a minimum**: name, age, address and type of setting exposed)
☐ confirm clinical signs and symptoms
☐ collect all pertinent medical information (recent medications, physician information, hospitalization, etc.)
☐ determine patient's immune status (history of **rubella** vaccination or serological evidence of **rubella** antibody).
☐ determine the possible source of exposure
- ☐ contact with a person who is suspected of having **rubella** disease
- ☐ travel or gathering
- ☐ medical facility

☐ list all contacts and determine those who do not have **rubella** immunity (pregnant women, household, school, work, physician/ER, clubs, carpool and other contacts)

2. Upon confirmation of the clinical diagnosis as possible rubella, ☐ arrange for serological testing (for lab diagnosis) and ☐ urine collection (nucleic acid "strain" analysis), and

3. Notify the California DHS as soon as possible by contacting your Immunization Branch Field representative.

4. Keep all contacts who do not have evidence of rubella immunity under surveillance for 23 days after last exposure.

5. Pregnant women with known or suspected rubella infection on exposure should be promptly referred to their prenatal care provider with this information.

The following time line depicts the clinical course of rubella and may be useful in the investigation process:

<table>
<tr><th colspan="3">Exposure and Incubation Period (12-23 days)</th><th>Rash (~3 days)</th><th colspan="2">Communicability</th></tr>
<tr><th>weeks: -3</th><th>-2</th><th>-1</th><th>RASH ONSET</th><th>1</th><th>2</th></tr>
<tr><td>Onset of rash minus 18 days is probable exposure
DATE:</td><td>Onset of rash minus 7 days is probable start of infectious period
DATE:</td><td>PRODROME: Mild symptoms include low-grade fever, malaise, swollen glands, and URI symptoms</td><td>DATE:</td><td colspan="2">Onset of rash plus 5-7 days is probable end of infectious period
DATE:</td></tr>
<tr><td colspan="3"></td><td colspan="3">Anthralgia may occur at same time or shortly after rash.</td></tr>
</table>

RUBELLA OUTBREAK CONTROL STRATEGY

The following documents should be referenced in the event of a rubella outbreak in a specific setting:

☐ ***Management of Rubella Outbreaks in Hospitals and Other Institutions (Including Jails and Prisons) 03/91.***

☐ ***Rubella Outbreak Investigation/Control at an Office Building, Factory, Retail Business, Etc. 07/97***